THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte JOHN S. MATTIS, JAMES C. MILROY,
PAUL VON DER LIPPE, GERALD L. SHIMIRAK,
PAUL S. CHAN and SEBASTIANO SCARAMPI

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Appeal No. 96-0733
Application 08/173,805[1]

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ON BRIEF

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Before MEISTER, ABRAMS and NASE, *Administrative Patent Judges*.

ABRAMS, *Administrative Patent Judge*.

DECISION ON APPEAL

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[1] Application for patent filed December 22, 1993. According to appellants, the application is a division of Application 07/922,460, filed July 30, 1992, now U.S. Patent No. 5,273,449, issued December 28, 1993, which is a division of Application 07/499,117, filed March 26, 1990, now U.S. Patent No. 5,153,988, issued October 13, 1992.

This is an appeal from the decision of the examiner finally rejecting claims 1 through 3, 5, 6, 8 through 15 and 38, which constitute all of the claims remaining of record in the application.

The appellants' invention is directed to a modular communications terminal block and mateable connector. The subject matter before us on appeal is illustrated by reference to claim 1, which reads as follows:

> 1. An environmentally protected terminal having a plurality of standardized sealed mateable/dematerable individual interfaces capable of interconnecting a plurality of devices in an outside environment, the apparatus comprising:
>
> a terminal including a plurality of paired electrical contacts, at least one end of each contact sealed in a gel sealing material within the terminal but capable of forming a repeatably sealed mateable/dematerable connection with a separate pair of electrical contacts apart from the terminal, the separate pair of electrical contacts being surrounded by an elastomeric member filled with a gel sealing material, the end opposite to the mateable/dematerable end within the terminal forming a permanently sealed electrical contact to a wire, wherein the pair of mateable/dematerable electrical contacts remains sealed before, during, and after connection to the separate pair electrical contacts, and wherein the interface between the separate paired electrical contacts and the block at mateable/dematerable electrical contact within the terminal is formable in the absence of specialized tools.

THE REFERENCES

The references relied upon by the examiner to support the final rejection are:

Luenberger	3,059,210	Oct. 16, 1962
Cairns	3,522,576	Aug. 04, 1970
Witek Jr. (Witek)	3,594,696	Jul. 20, 1971
Carlisle	4,058,358	Nov. 15, 1977
Narozny et al. (Narozny)	4,295,704	Oct. 20, 1981
Chan	4,425,017	Jan. 10, 1984
Debbaut	4,864,725	Sep. 12, 1989

THE REJECTION

Claims 1 through 3, 5, 6, 8 through 15 and 38 stand rejected under 35 U.S.C. § 103 as being unpatentable over Chan in view of Witek, Narozny, Carlisle, Cairns, Debbaut and Luenberger.

The rejection is explained in the Examiner's Answer.

The opposing viewpoints of the appellants are set forth in the Brief.

OPINION

The appellants' invention is directed to an environmentally protected terminal in which separate modular electrical plugs can repeatedly be inserted and removed without ever exposing the electrical contacts to the environment. As stated by the appellants on page 5 of the Brief, "[t]his is accomplished by filling both the socket and the plug with a suitable gel sealing material." In operation, the gel sealing material is displaced when the contacts are mated and then returns to its original location when they are demated. As manifested in claim 1, the

invention comprises a terminal including a plurality of paired electrical contacts, at least one end of which is sealed in a gel sealing material, and a separate pair of electrical contacts mateable and demateable therewith which is surrounded by an elastomeric member filled with a gel sealing material. The elastomeric member compensates for the excess of gel sealing material which occurs when the separate contacts are mated with the terminal board contacts. The claim further requires that "the pair of mateable/demateable electrical contacts" (which we interpret in view of the remainder of the claim to mean those contacts located on the terminal board) "remains sealed before, during, and after connection to the separate pair electrical contacts."

All of the claims stand rejected as being unpatentable over the combined teachings of seven references. The examiner has looked to the various references for the following teachings:

> Chan - the basic structure claimed, except for the elastomeric material surrounding the separate pair of electrical connectors and placing gel sealing material in both the terminal and the separate pair structure.
>
> Cairns - elastomeric material in a structure surrounding electrical connectors.
>
> Witek - elastomeric material in a structure surrounding electrical connectors, individual apertures for plural electrical contacts, and keyed openings.

Luenberger - sealant (grease) in a cavity with an electrical connector.

Debbaut - encapsulated gel in a cavity with an electrical connector.

Carlisle - a protective cover on an electrical outlet box.

Narozny - insulation displacement electrical contacts.

The examiner has set forth his position on pages 4 through 6 of the Answer. From our perspective, what this basically amounts to is that it would have been obvious to one of ordinary skill in the art to make the housing (212) which surrounds the Chan "separate pair of electrical contacts" (214) of elastomeric material in view of the teachings of Cairns and Witek, and to fill that housing with gel sealing material, in view of the use of such material in the terminal portion (22) of Chan, as well as in Luenberger and Debbaut. The other references have been cited with regard to additional structure recited in the dependent claims.

The appellants take issue with the examiner's theory, the cornerstone of their argument being that there is no teaching in any of the references to utilize sealing gel or the like in both the terminal and the separate plug, much less to construct these

elements such that the expansion of the gel is accommodated in such a fashion that it is not lost when the connectors are mated and will return to its initial position upon demating. In particular, the appellants urge that there would have been no reason to make the Chan terminal and separate connector of elastomeric material because the patentee already had provided for the expansion of the gel by means of a flexible diaphragm. Hindsight, the appellants contend, is the only means by which the one of ordinary skill in the art would have been motivated to modify the Chan device in the manner proposed by the examiner.

The guidance provided by our reviewing court with regard to rejections based on obviousness is as follows: The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a *prima facie* case of obviousness under 35 U.S.C. § 103, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See *Ex parte Clapp*, 227 USPQ 972, 973 (BPAI 1985). To this end, the requisite motivation must stem

from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example, *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), *cert. denied*, 488 U.S. 825 (1988).

Applying this to the situation at hand, it is our conclusion that the teachings of the references fail to establish the required *prima facie* case of obviousness, essentially for the reasons expressed by the appellants on pages 5 through 7 of their Brief. We focus upon the lack in the applied prior art of any

teaching of utilizing a sealing gel in both of the electrical connectors, as well as the failure in the prior art cited to recognize, explicitly or implicitly, the concept of maintaining the gel in place "before, during, and after connection," which is a requirement of both of the independent claims. It is our further view that no suggestion can be gleaned from the references which would have motivated one of ordinary skill in the art to make either of the components of the Chan device of elastomeric material, for no purpose would have been served by

such a modification. Further in this regard, it is clear to us that the Chan components, although made of plastic or rubber, were not intended to be elastomeric, with the exception, of course, of sealing diaphragm 223.

Our reviewing court stated in *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992):

> It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention" (citations omitted).

It appears to us that the only suggestion for combining the references in the manner proposed by the examiner in the present case is found via the luxury of such impermissible hindsight. This being the case, we will not sustain the rejection.

The decision of the examiner is reversed.

REVERSED

JAMES M. MEISTER Administrative Patent Judge	)
NEAL E. ABRAMS Administrative Patent Judge	) BOARD OF PATENT)) APPEALS AND)) INTERFERENCES
JEFFREY V. NASE Administrative Patent Judge	)

William D. Zahrt, II
Raychem Corporation
Mail Stop 120/6600
300 Constitution Drive
Menlo Park, CA 94025